THE TREASURE CHEST:

A LOOK AT THE MONTANA STATE SYMBOLS



User Guide
Provided by The Montana Historical Society
Education Office
(406) 444-4789
www.montanahistoricalsociety.org

Funded by a Grant from the E.L. Wiegand Foundation ©2003 The Montana Historical Society



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Inventory

Fish Trivia

Borrower:		Booking Period:							
The borrower is responsible for the safe use of the footlocker and all its contents during the designated booking period. Replacement and/or repair for any lost item and/or damage (other than normal wear and tear) to the footlocker and its contents while in the borrower's care will be charged to the borrower's school. Please have an adult complete the footlocker inventory checklist below, both when you receive the footlocker and when you repack it for shipping, to ensure that all of the contents are intact. After you inventory the footlocker for shipping to the next location, please mail or fax this completed form to the Education Office.									
ITEM	BEFORE USE	AFTER USE	CONDITION OF ITEM	MHS USE					
Montana state flag									
Cross-section of ponderosa pine and cone									
Model of cutthroat trout									
Meadowlark nest									
Model of Maiasaura and nest									
1 Montana Twister mat									
1 Montana Twister spinner									
Large format photo of Meadowlark									
Audiotape of meadowlark song									
Audiotape of "Montana"									
Fish CD									

Education Office, Montana Historical Society, PO Box 201201, Helena, MT 59620-1201 406-444-4789, Fax: 406-444-2696, jkeenan@state.mt.us

Inventory Completed By

Date



Footlocker Contents



Left:

Dinosaur slide show and script; Maiasaura model and book

Right: Fish pictures; trivia; and Cutthroat Trout model



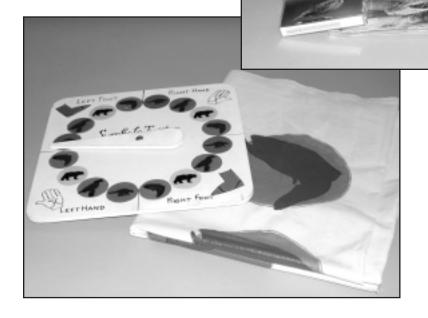


Left:Grizzly Bear books;
Meadowlark nest and photo



Left:Pressed Bitterroot and book;
mounted Ponderosa Pine cross
section and cone

Right: Tapes and CD; flag; books



Left:Montana Symbols
Twister spinner and mat



Footlocker Use-Some Advice for Instructors

How do I make the best use of the footlocker?

In this User Guide you will find many tools for teaching with objects and primary sources. We have included teacher and student level narratives, as well as a classroom outline, to provide you with background knowledge on the topic. In section one there are introductory worksheets on how to look at/read maps, primary documents, photographs, and artifacts. These will provide you and your students valuable tools for future study. Section three contains lesson plans for exploration of the topic in your classroom—these lessons utilize the objects, photographs, and documents in the footlocker. The "Resources and Reference Materials" section contains short activities and further exploration activities, as well as bibliographies.

What do I do when I receive the footlocker?

IMMEDIATELY upon receiving the footlocker, take an inventory form from the envelope inside and inventory the contents in the "before use" column. Save the form for your "after use" inventory. This helps us keep track of the items in the footlockers, and enables us to trace back and find where an item might have been lost.

What do I do when it is time to send the footlocker on to the next person?

Carefully inventory all of the items again as you put them in the footlocker. If any items show up missing or broken at the next site, your school will be charged for the item(s). Send the inventory form back to:

Education Office, Montana Historical Society, Box 201201, Helena, MT 59620-1201 or fax at (406) 444-2696.

Who do I send the footlocker to?

At the beginning of the month you received a confirmation form from the Education Office. On that form you will find information about to whom to send the footlocker, with a mailing label to affix to the top of the footlocker. Please insure the footlocker for \$1000 with UPS (we recommend UPS, as they are easier and more reliable then the US Postal Service) when you mail it. This makes certain that if the footlocker is lost on its way to the next school, UPS will pay for it and not your school.

What do I do if something is missing or broken when the footlocker arrives, or is missing or broken when it leaves my classroom?

If an item is missing or broken when you initially inventory the footlocker, **CONTACT US IMMEDIATELY** (406-444-4789), in addition to sending us the completed (before and after use) inventory form. This allows us to track down the missing item. It may also release your school from the responsibility of paying to replace a missing item. If something is broken during its time in your classroom, please call us and let us know so that we can have you send us the item for repair. If an item turns up missing when you inventory before sending it on, please search your classroom. If you cannot find it, your school will be charged for the missing item.



Footlocker Evaluation Form

Evaluator's Name	Footlocker	Name					
School Name	chool Name Phone						
Address	City	Zip Code					
1. How did you use the materi	al? (choose all tha	t apply)					
☐ School-wide exhibit ☐ Classro	•		om discussion				
☐ Supplement to curriculum ☐	Other						
2. How would you describe the		•					
☐ Pre-school students ☐ Grade							
☐ College students ☐ Senio			ecial interest				
☐ Other							
2a. How many people viewed/used	the footlocker?	-					
3. Which of the footlocker mat	erials were mos	t engaging?					
☐ Artifacts ☐ Documents			□ Video				
☐ Audio Cassette ☐ Books	□ Slides	□ Other					
4. Which of the User Guide ma			- (V 1 1				
□ Narratives□ Lessons□		□ biographie	s/vocabulary				
5. How many class periods did	•	_					
□ 1-3 □ 4-6	☐ More than 6	□ Other					
6. What activities or materials to this footlocker?	would you like	to see added					

The Treasure Chest: A Look at the Montana State Symbols Footlocker Evaluation Form (continued)

7.	Would you request this footlocker again? If not, why?
8.	What subject areas do you think should be addressed in future footlockers?
9.	What were the least useful aspects of the footlocker/User Guide?
10	. Other comments.
-	
-	



Montana Historical Society Educational Resources Footlockers, Slides, and Videos

Footlockers

Architecture: It's All Around You—Explores the different architectural styles and elements of buildings, urban and rural, plus ways in which we can preserve buildings for future generations. *

Cavalry and Infantry: The U.S. Military on the Montana Frontier—Illustrates the function of the U.S. military and the life of an enlisted man on Montana's frontier, 1860 to 1890. *

Coming to Montana: Immigrants from Around the World—Showcases the culture, countries, traditions, and foodways of Montana's immigrants through reproduction clothing, toys, and activities. *

Daily Life on the Plains: 1820-1900—Includes items used by American Indians, such as a painted deerskin robe, parfleche, war regalia case, shield, Indian games, and an educational curriculum.

Discover the Corps of Discovery: The Lewis and Clark Expedition in Montana—Traces the Corps' journey through Montana and their encounters with American Indians. Includes bison hide, trade goods, books, and more! *

East Meets West: The Chinese Experience in Montana—Explores the lives of the Chinese who came to Montana, the customs that they brought with them to America, how they contributed to Montana communities, and why they left. *

From Traps to Caps: The Montana Fur Trade—Gives students a glimpse at how fur traders, lived and made their living along the creeks and valleys of Montana, 1810-1860. *

Gold, Silver, and Coal-Oh My!: Mining Montana's Wealth—Chronicles the discoveries that drew people to Montana in the late 19th century and how the mining industry developed and declined. *

Inside and Outside the Home: Homesteading in Montana 1900-1920—Focuses on the thousands of people who came to Montana's plains in the early 20th century in hope of make a living through dry-land farming. *

Lifeways of Montana's First People—Emphasizes the tribal lifeways of the people who utilized the land we now know as Montana in the years around 1800. *

(continued)

The Treasure Chest: A Look at the Montana State Symbols Educational Resources Footlockers, Slides, and Videos (continued)

Montana Indians: Yesterday and Today—Emphasize the renaissance of Montana's Indian cultures and their effort to maintain their identity and traditions. *

Prehistoric Life in Montana—Exposes Montana prehistory (10,000-12,000 years ago) and archaeology through a study of the Pictograph Cave prehistoric site. *

Stones and Bones: Prehistoric Tools from Montana's Past—Uncovers Montana's prehistory and archaeology through a study of reproduction stone and bone tools. Contains casts and reproductions from the Anzick collection found in Wilsall, Montana.

The Cowboy Artist: A View of Montana History—Presents over 40 Charles M. Russell prints and hands-on artifacts as a window into Montana history by discussing Russell's art and how he interpreted aspects of Montana history.

The Home Fires: Montana and World War II—Describes Montana life during the 1941-1945 transformation years. Illustrates aspects of everyday life, as well as military projects such as the Fort Missoula Alien Detention Center. +

The Treasure Chest: A Look at the Montana State Symbols—Provides hands-on educational activities that foster a greater appreciation of our state's symbols and their meanings.

Tools of the Trade: Montana Industry and Technology—Surveys the evolution of tools and technology in Montana from late 1700s to the present. *

Woolies and Whinnies: The Sheep and Cattle Industry in Montana—Reveals the fascinating stories of cattle, horse, and sheep ranching in Montana, 1870 to 1920. *

^{*} Funding for these footlockers was provided by the E.L. Wiegand Foundation of Reno, Nevada.

⁺ Funding for this footlocker was provided by U.S. Bank, Montana.

SLIDE UNITS

Children in Montana—Presents life in Montana through images of children.

Fight for Statehood and Montana's Capital—Outlines how Montana struggled to become a state and to select its capital city.

Frontier Towns—Illustrates the development, character, and design of early Montana communities.

Jeannette Rankin: Woman of Peace—Portrays the life and political influence of the first woman elected to Congress.

Native Americans Lose Their Lands—Examines the painful transition for native peoples to reservations.

Power Politics in Montana—Covers the period when the copper industry influenced state politics.

The Depression in Montana—Examines the Depression and federal project successes in Montana.

The Energy Industry—Discusses the history and future of the energy industry in Montana.

Transportation—Describes the development and influence of transportation in the state.

VIDEOS

Bella Vista—Reveals the story of 1,000 Italian detainees at Fort Missoula's Alien Detention Center between 1941 and 1945.

Hands-On History!—Teaches how history can be fun through the experiences of ten Montana kids as they pan for gold, go on an architectural scavenger hunt, and commune with former residents in Virginia City. Accompanied by lesson plans.

"I'll ride that horse!" Montana Women Bronc Riders—Captures the exciting skills and daring exploits of Montana's rich tradition of women bronc riders who learned to rope, break, and ride wild horses, told in their own words.

Montana: 1492—Describes the lifeways of Montana's first people through the words of their descendants.

Montana Defined by Images: An Artist's Impression—Surveys Montana's artistic landscape over the last 30 years and looks at the work of contemporary Montana artists and the ways in which they explore issues of transition and conflicting needs in a changing physical and cultural landscape.

Montana State Capitol Restoration—Captures the history, art, and architecture of Montana's State Capitol prior to the 1999 restoration. Created by students at Capital High School in Helena.

People of the Hearth—Features the role of the hearth in the lives of southwestern Montana's Paleoindians.

Russell and His Work—Depicts the life and art of Montana's cowboy artist, Charles M. Russell.

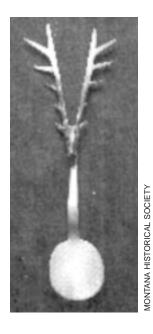
The Sheepeaters: Keepers of the Past—Documents the lifeways of a group of reclusive Shoshone-speaking Indians known as the Sheepeaters. Modern archaeology and anthropology, along with firsthand accounts of trappers and explorers, help to tell their story.

Sacagawea of the Northern Shoshoni—Traces the amazing life story of Sacagawea and her experiences with Lewis and Clark Expedition. Created by students at Sacajawea Middle School in Bozeman.



Primary Sources and How to Use Them

The Montana Historical Society Education Office has prepared a series of worksheets to introduce you and your students to the techniques of investigating historical items: artifacts, documents, maps, and photographs. The worksheets introduce students to the common practice of using artifacts, documents, maps, and photographs to reveal historical information. Through the use of these worksheets, students will acquire skills that will help them better understand the lessons in the User Guide. Students will also be able to take these skills with them to future learning, i.e. research and museum visits. These worksheets help unveil the secrets of artifacts, documents, maps, and photographs.



See the examples below for insight into using these worksheets.

Artifacts

Pictured at left is an elk-handled spoon, one of 50,000 artifacts preserved by the Montana Historical Society Museum. Here are some things we can decipher just by observing it: It was hand-carved from an animal horn. It looks very delicate.

From these observations, we might conclude that the spoon was probably not for everyday use, but for special occasions. Further research has told us that it was made by a Sioux Indian around 1900. This artifact tells us that the Sioux people carved ornamental items, they used spoons, and they had a spiritual relationship with elk.

Photographs

This photograph is one of 350,000 in the Montana Historical Society Photographic Archives. After looking at the photograph, some of the small "secrets" that we can find in it include: the shadow of the photographer, the rough fence in the background, the belt on the woman's skirt, and the English-style riding saddle.

Questions that might be asked of the woman in the photo are: Does it take a lot of balance to stand on a horse, is it hard? Was it a hot day? Why are you using an English-style riding saddle?



MONTANA HISTORICAL SOCIE

(continued)



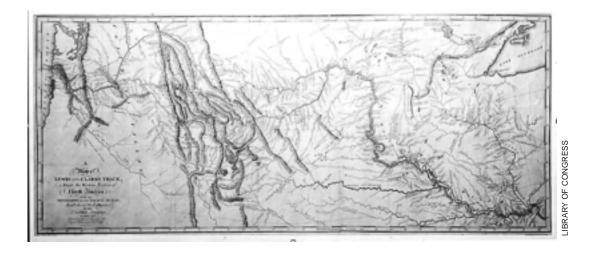
Documents

This document is part of the Montana Historical Society's archival collection. Reading the document can give us a lot of information: It is an oath pledging to catch thieves. It was signed by 23 men in December of 1863. It mentions secrecy, so obviously this document was only meant to be read by the signers.

Further investigation tell us that this is the original Vigilante Oath signed by the Virginia City Vigilantes in 1863. The two things this document tell us about life in Montana in the 1860s are: there were lots of thieves in Virginia City and that traditional law enforcement was not enough, so citizens took to vigilance to clean up their community.

Maps

This map is part of the map collection of the Library of Congress. Information that can be gathered from observing the map includes: The subject of the map is the northwestern region of the United States—west of the Mississippi River. The map is dated 1810 and was drawn by William Clark. The three things that are important about this map are: it shows that there is no all-water route to the Pacific Ocean, it documents the Rocky Mountains, and it shows the many tributaries of the Missouri River.





How to Look at an Artifact

(Adapted from the National Archives and Records Administration Artifact Analysis Worksheet.)

Artifact: An object produced or shaped by human workmanship of archaeological or historical interest.

1. What materials were used to make this artifact?										
\square Wood	Glass	☐ Cotton								
☐ Stone	Paper	☐ Plastic								
Leather	☐ Cardboard	Other								
w it looks and	feels:									
	Weight_									
	Moveabl	le Parts								
	Anything	g written, printed, or stamped on it								
pictures of the										
	Bottom	Side								
	☐ Wood ☐ Stone ☐ Leather w it looks and	 □ Wood □ Glass □ Paper □ Leather □ Cardboard w it looks and feels: ■ Weight ■ Moveable 								

The Treasure Chest: A Look at the Montana State Symbols How to Look at an Artifact (continued)

3. U	ses of the Artifacts.
A.	How was this artifact used?
B.	Who might have used it?
C.	When might it have been used?
D.	Can you name a similar item used today?
4. S	ketch the object you listed in question 3.D.
5. C	lassroom Discussion
A.	What does the artifact tell us about technology of the time in which it was made and used?
B.	What does the artifact tell us about the life and times of the people who made and used it?



How to Look at a Photograph

(Adapted from the National Archives and Records Administration Photograph Analysis Worksheet.)

Photograph: an image recorded by a camera and reproduced on a photosensitive surface.

What secrets do you see?
Can you find people, objects, or activities in the photograph? List them below.
People
Objects
Activities
What questions would you like to ask of one of the people in the photograph?
Where could you find the answers to your questions?



How to Look at a Written Document

(Adapted from the National Archives and Records Administration Written Analysis Worksheet.)

Document: A written paper bearing the original, official, or legal form of something and which can be used to furnish decisive evidence or information.

1.	Type of docume	ent:							
	Newspaper	Journal	\square Press Release \square Diary						
	Letter	■ Map	☐ Advertisement ☐ Census Reco	rd					
	Patent	Telegram	Other						
2.	Which of the fo	llowing is on the do	cument:						
	Letterhead	☐ Typed Letters	☐ Stamps						
	Handwriting	☐ Seal	Other						
3.	Date or dates of	of document:							
4.	Author or creat	tor:							
5.	Who was suppo	sed to read the doc	ument?						
6.	List two things	the author said that	you think are important:						
	1								
	2.								
7.			you about life in Montana at the						
	time it was written:								
	1								
	2								
8.	Write a questio	n to the author left	unanswered by the document:						



How to Look at a Map

(Adapted from the National Archives and Records Administration Map Analysis Worksheet.)

Map: A representation of a region of the earth or stars.

1. W	hat is the subje	ect of the map?	
	River	Stars/Sky	Mountains
	Prairie	☐ Town	Other
2. W	hich of the follo	owing items is on	the map?
	Compass	☐ Scale	Name of mapmaker
	Date	☐ Key	Other
	Notes	Title	
3.	Date of map: _		
4.	Mapmaker:		
5.	Where was the	map made:	
6.	List three thing	gs on this map th	at you think are important:
7.	Why do you th	ink this map was	drawn?
		-	
Q	Write a sucction	on to the manmal	er that is left unanswered by the map.
0.	write a question	on to the mapillar	ter that is left unansweled by the Map.



Standards and Skills

State 4th Grade Social Studies Standards

Lesson Number:	1	2	3	4	5	6	7	8	9
Students access, synthesize, and evaluate information to communicate and apply social studies knowledge to real world situations.	•								~
Students analyze how people create and change structures of power, authority, and governance to understand the operation of government and to demonstrate civic responsibility.	•								
Students apply geographic knowledge and skill (e.g., location, place, human/environment interactions, movement, and regions).			/	~	/	/	/	/	
Students demonstrate an understanding of the effects of time, continuity, and change on historical and future perspectives and relationships.									
Students make informed decisions based on an understanding of the economic principles of production, distribution, exchange, and consumption.									
Students demonstrate an understanding of the impact of human interaction and cultural diversity on societies.	~	~							

(continued)

Skill Areas

Lesson Number:	1	2	3	4	5	6	7	8	9
Using primary documents		/							
Using objects	/		/	/	/				
Using photographs			/	/			/	/	
Art	✓		/	/				~	
Science									
Math									
Reading/writing						'	'		
Map Skills									
Drama, performance, re-creation		/							
Group work		~			~		~		/
Research									
Music		~		~					
Bodily/Kinesthetic									~
Field Trip									



State Symbols Adoption Time Line

1893	Seal
1895	Flower, Bitterroot
1905	Flag
1931	Bird, Western Meadowlark
1945	Song, "Montana"
1949	Tree, Ponderosa Pine
1969	Gemstones, Sapphire and Agate
1973	Grass, Bluebunch Wheatgrass
1977	Fish, Blackspotted Cutthroat Trout
1982	Animal, Grizzly Bear
1983	Ballad, "Montana Melody"
1985	Fossil, Duck-billed Dinosaur
2001	Butterfly, Mourning Cloak



Vocabulary List

Symbol—something that stands for something else, or an object that represents a person, place, or thing.

Birds:

Beak—long, sharp part in front of and covering the bird's mouth, also called a bill.

Bird—a group of animals with feathers and wings that usually can fly.

Feather—special structure that covers a bird and helps it fly.

Nest—shelter made by birds where they lay eggs and protect young.

Plumage—the color pattern of a bird.

Wings—what birds have instead of arms that help them fly.

Flower:

Petal—separate, often brightly colored, outside segments of a flower.

Root—the usually underground portion of a plant that serves as support, draws food and water from the surrounding soil, and stores food.

Tree:

Conifer—any of various, predominantly evergreen, cone-bearing trees. Have needles, not leaves.

Cone—a conical, spherical, or cylindrical structure borne by certain trees, such as pines, consisting of clusters of stiff overlapping, woody scales, between which are unfertilized plant seeds.

Deciduous—any variety of trees that sheds its leaves at the end of a growing season.



Lesson 1: State Seal and Flag

Objectives

At the conclusion of the lesson, students will be able to:

 Describe what a symbol is, as well as the significance of the components of the Montana state seal and flag.

Time

One 45-50 minute class.

Materials

- Footlocker Materials: state flag
- User Guide Materials: coloring page of flag
- Teacher Provided Materials: paper, markers or crayons

Pre-Lesson Preparation

Hang the flag up in the classroom. Prepare for the lesson by reading the sections on the seal and the flag from *Symbols of Montana*.

Procedure

- 1. Before examining the seal and the flag, a discussion of the meaning of symbols must take place. The definition of "symbol" should be discussed and students offer examples from their immediate surroundings (the American flag, clock, numbers, calendar, restroom gender signs, etc). What do these symbols mean? Is there one common meaning? Can these symbols mean different things to different people? Ask students to offer symbols seen at home, on the street, in other buildings. What do these symbols mean? Are their meanings commonly held or specialized?
- 2. Have students examine the flag and the seal. Read the pages on the seal and the flag from *Montana*: Facts and Symbols. For more in depth information, read the pages on the seal and flag in Symbols of Montana.
- 3. Use the questions below to prompt a discussion on the elements of the seal and flag.
- 4. Students are now prepared to create their own seal or flag for Montana. Before this activity, teachers may want to brainstorm with the class about what might make an appropriate Montana symbol for the seal or flag. Students should present their seals/flag to the class.

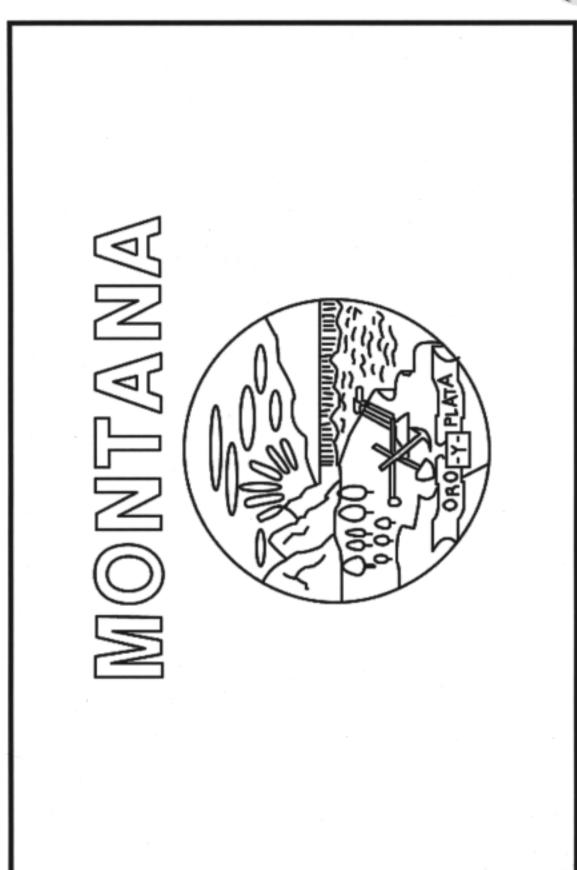
Discussion Questions

- 1. What does each symbol mean or stand for?
- 2. Is it an appropriate representation of Montana?

Further Exploration

Have students complete the flag-coloring page.







Lesson 2: State Song "Montana"

Objectives

At the conclusion of the lesson, students will be able to:

• Sing the chorus to "Montana."

Time

One 45-50 minute class.

Materials

- Footlocker
 Materials: tape of state song
- User Guide Materials: lyric sheet
- Teacher Provided Materials: tape player

Pre-Lesson Preparation

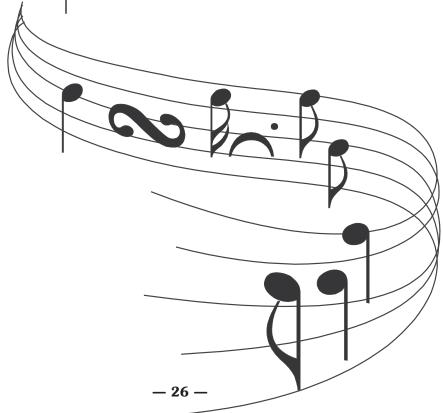
Read the section on the state song from Symbols of Montana.

Procedure

- 1. Read aloud the section from *Symbols of Montana* on the song to the class.
- 2. Pass out the lyrics to "Montana". Play the tape and listen to Joseph Howard sing the song. Join in on the second chorus.
- 3. As a class write a new state song using the tune to a popular song like "Mary had a little lamb" or "Happy Birthday."
- 4. Have the class sing their new song for another class.

Further Exploration

 Listen to state songs from other states and discuss how they differ from Montana's song.





Montana

Lyrics by Charles Cohan Melody by Joseph E. Howard

Tell me of that Treasure State
Story always new,
Tell of its beauties grand
And its hearts so true.
Mountains of sunset fire
The land I love the best
Let me grasp the hand of one
From out the golden West

Chorus:

Montana, Montana, Glory of the West
Of all the states from coast to coast, You're easily the best
Montana, Montana, Where skies are always blue
MONTANA, Montana I love you.

Each country has its flow'r;
Each one plays a part,
Each bloom brings a longing hope
To some lonely heart.
Bitter Root to me is dear
Growing in my land
Sing then that glorious air
The one I understand.

Repeat Chorus.



Lesson 3: Bitterroot and Ponderosa Pine

Objectives

At the conclusion of the lesson, students will be able to:

- Describe the traditional uses of the bitterroot.
- Explain what a coniferous tree is.

Time

One 60-minute class.

Materials

- Footlocker Materials: pine cone and the cross-section of tree, mounted bitterrroot
- User Guide
 Materials:
 vocabulary list,
 "Origin of the
 Bitterroot" story,
 story map, coloring
 pages, drawing of
 bitterroot
- Teacher Provided Materials: colored pencils, crayons

Pre-Lesson Preparation

Read the sections on the flower and tree from *Symbols of Montana*. Also read about the traditional uses and the first white impressions of the bitterroot in DeSanto's book *Bitterroot*, pages 1-11. See the vocabulary list.

Procedure

- 1. Read the "Origin of the Bitterroot" to students.
- 2. Show students the dried bitterroot sample and give them each a copy of the bitterroot plant handout. Explain how the plant is harvested.
- 3. Give students the story map and have them make a map of the "Origin of the Bitterroot."
- 4. Discuss vocabulary words and look pictures of the Ponderosa Pine. Examine the pine needles, cones, and the cross-section.
- 5. On the average the Ponderosa Pine tree reaches maturity when 60 to 125 feet tall (about 150 years old!) and approximately 20 to 30 inches in diameter. Have students assume the persona of a long living pine tree and write a short story of all of the events it experienced during its long life in the forest.

Discussion Questions

- 1. How does the bitterroot play such a significant role in Salish culture?
- 2. What is the bitterroot used for?
- 3. What is the difference between a coniferous tree and a deciduous tree?

Further Exploration

 Have students complete Bitterroot and Ponderosa Pine coloring pages.



The Origin of the Bitterroot

It was a time of famine in the land that is now known as the Bitterroot Valley. An old woman, the wife of a medicine man, was grieved because her children were hungry. Without meat or fish, they were slowly starving to death. They had been eating shoots from sunflower plants, but the only ones left were old and woody.

"My sons have no food," mourned the old mother. "Soon all of them will die. I will go to a place where I can weep alone and sing the song of death."

So she went to the stream now called the Little Bitterroot and sat down beside it. There she bowed low until her face touched the ground and her gray hair spread out upon the earth. Bitter tears fell as she sang the song of death.

The Sun, coming up over the mountains overlooking the valley, heard the death song. He saw the grieving woman and called to her guardian spirit. "Your child

sorrows for her starving people," the Sun Father said to the spirit. "You must go to her. Comfort her with food and with beauty out of dead things."

The guardian spirit took the form of a red bird and flew down to the weeping woman. Softly he spoke to her. "The tears of your sorrow have gone into the soil, and there the roots of a new plant are being formed. The plant will have leaves close to the ground. Its blossom will first have the rose of my wing feathers and then the white of your hair.

"Your people will dig the root of the plant and will eat it. They will find it bitter from your sorrow, but it will be food for them. They will see the flowers and will say, "Here is the silver of our mother's hair upon the ground and the rose from the wings of the spirit bird. Our mother's tears of bitterness have given us food."



Story Map

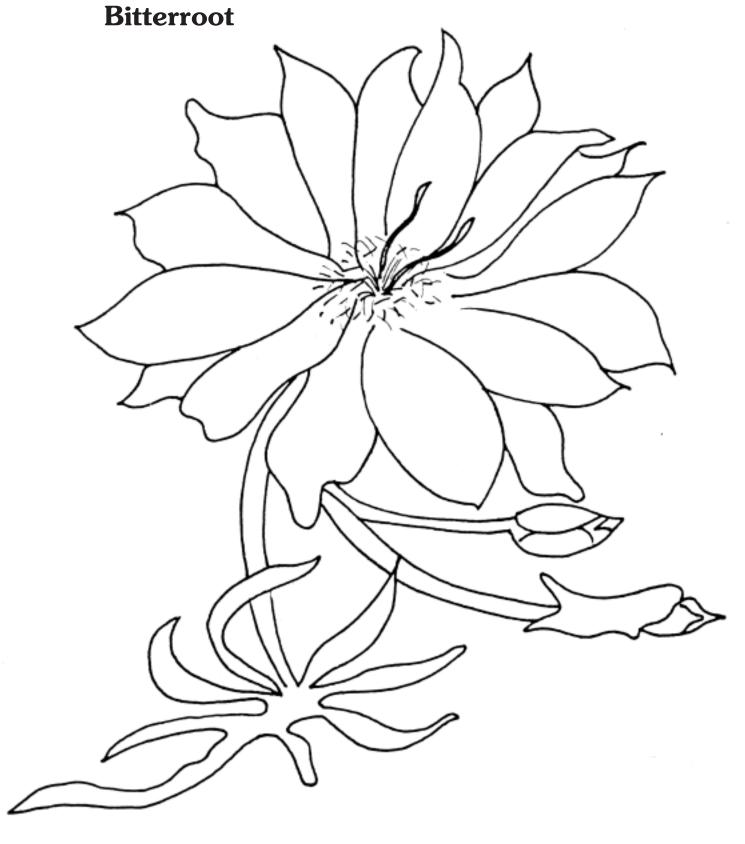
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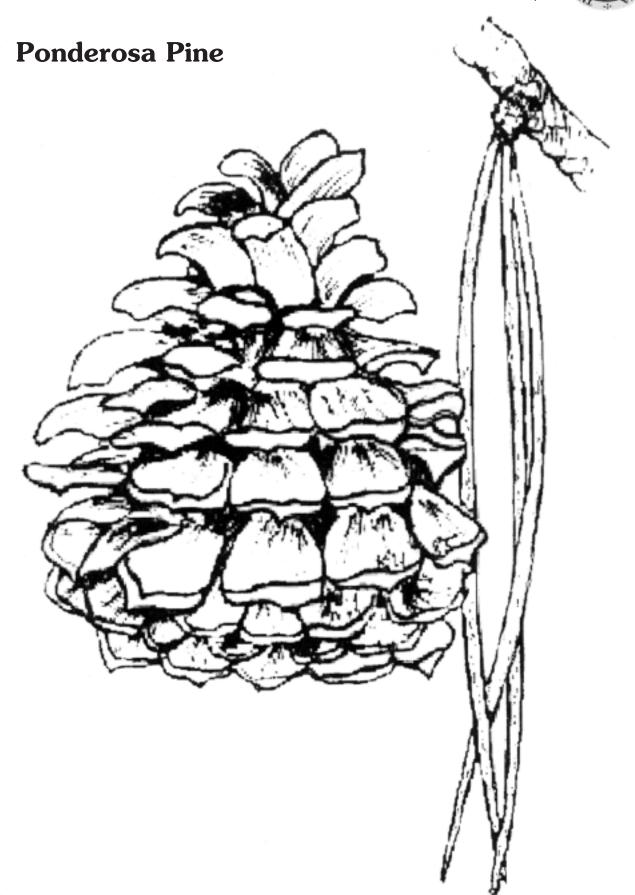
Bitterroot













Lesson 4: Western Meadowlark

Objectives

At the conclusion of the lesson, students will be able to:

 Identify the Western Meadowlark and its characteristics.

Time

On 60-minute class.

Materials

- Footlocker Materials: photograph of Meadowlark, nest, and song tape
- User Guide Materials: coloring page, sound map, Meadowlark information
- Teacher Provided Materials: copies of sound map

Pre-Lesson Preparation

Read the section on the Western Meadowlark from *Symbols of Montana*. Review the bird words on the vocabulary list.

Procedure

- 1. Show students the photograph of the meadowlark. Identify the bird's colors and parts, according to the vocabulary.
- 2. Play the Meadowlark song for students.
- 3. Discuss what makes the Meadowlark different from other birds they have seen.
- 4. Show the nest and talk about how birds lay eggs instead of birthing live like humans do.
- 5. Have students create a "bird-sound map." Have students sit outside in various places and record the different bird songs that they hear on the sound map. Each song should be represented by it's own symbol. Have students plot them on the map in the directions from which they hear them in relation to themselves.

Discussion Questions

1. Why does each bird have a different song?

Further Exploration

- Hand out the Meadowlark coloring page. Have students color it like the photograph of the Meadowlark.
- Have students bring in feathers they may find to compare different colors that make up plumage of birds. For both safety and ecological reasons, do not encourage students to bring in nests.
- Ask for possible explanations of how the Meadowlark got its name. What about other Montana birds such as the Magpie and Bald Eagle?
- Contact a member of your local Audubon Society and have them visit your classroom and talk about local birds.



Western Meadowlark

Name

Sturnella neglecta—Sturnella from sturnus, "a starling" L. and -ella "little"; hence "little starling" (even through the two Meadowlark species on our continent are larger than the European Starling); and neglecta meaning neglected (overlooked); supposedly so named by John James Audubon because the Lewis and Clark Expedition neglected to realize that it was a separate species from the Eastern Meadowlark.

Description

Western Meadowlarks are heavy-bodied, short-tailed, and long-billed birds with white outer tail feathers (obvious when these birds fly away). They prefer open grassy habitats. The males defend their nesting territory by singing from fence posts, tall grass, or bushes. They are distinguished best from their similar looking eastern species by their song, which is described as a "rich, low, descending warble which begins with well spaced, clear, short whistles and ends with a rapid gurgle."

Range

They nest from the mid-western states to the Pacific Coast, from Canada to Mexico. They migrate in the fall to spend the winter months as far away as southern Mexico.

Diet

Their diet consists of mostly animal food (beetles, cutworms, caterpillars, spiders, grasshoppers, crane flies, and the like) with the remainder being grass and forb seeds.

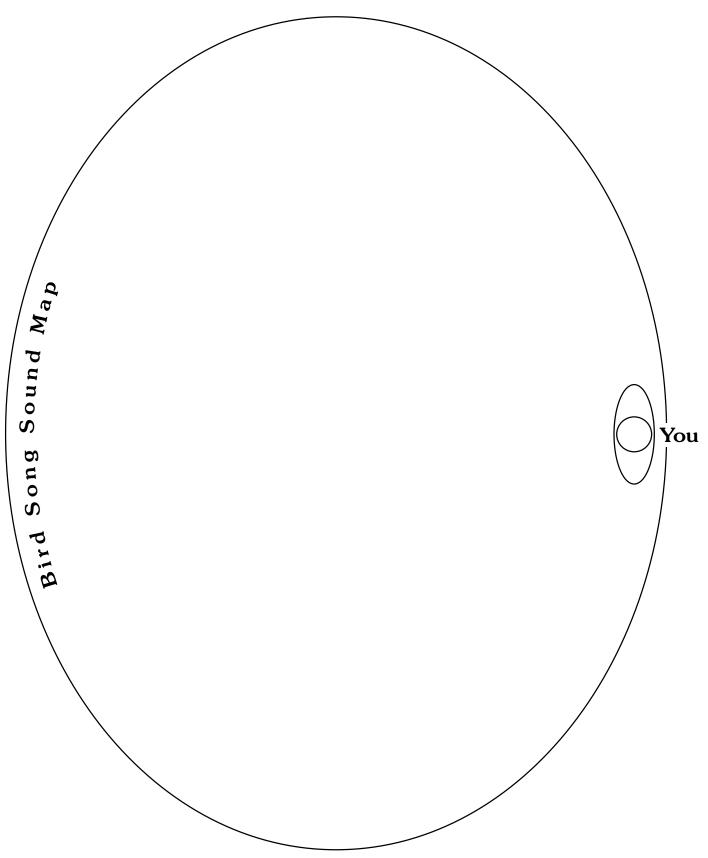
Nest and Eggs

The female usually builds her nest on dry ground in a natural scrape or depression; of coarse grass, lined with finer grass and hair. Sometimes they build a domed canopy nest of grass, bark, and forbs interwoven with surrounding vegetation; with an opening on one side. They generally lay 3-7 eggs that are white marked with browns and purples. The eggs are incubated for 13-15 days. After hatching the young birds are fed by both parents. The juveniles can fly and leave the nest after about 12 days.

State Bird

In the early 1930s the school children of Montana were polled to determine the bird they thought most represented Montana. They overwhelmingly chose the Western Meadowlark, and the Legislature agreed with them, making it the official state bird of Montana in 1931. The Western Meadowlark is also the state bird of Kansas, Nebraska, North Dakota, Oregon, and Wyoming.





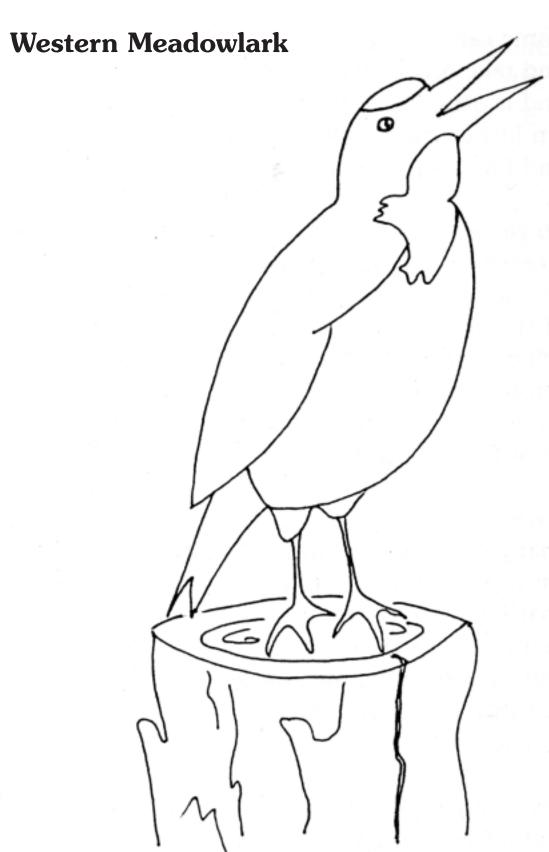


Western Meadowlark



PHOTO BY GEORGE JAMESON







Lesson 5: Blackspotted Cutthroat Trout

Objectives

At the conclusion of the lesson, students will be able to:

 Identify the characteristics of the Cutthroat Trout.

Time

One 50 minute lesson.

Materials

- Footlocker
 Materials: Cutthroat
 model, "Fish of
 Montana" CD, Fish
 Trivia
- User Guide Materials: none
- Teacher Provided Materials: none

Pre-Lesson Preparation

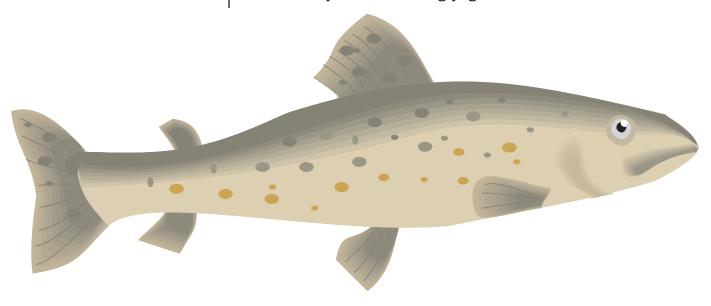
Read the section on the fish from Symbols of Montana.

Procedure

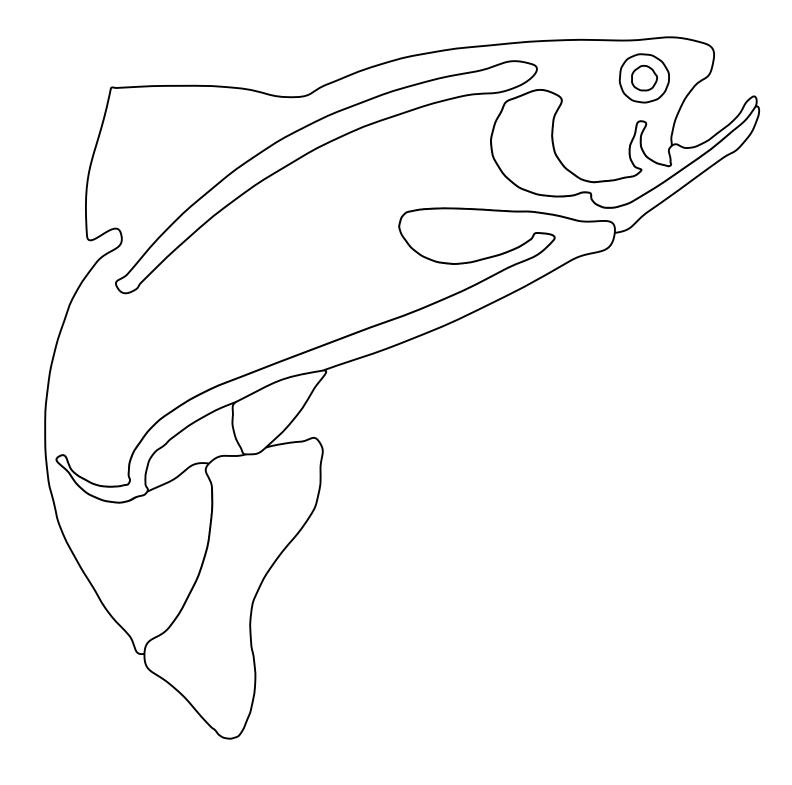
- 1. Show students the model of the cutthroat. Read aloud the section on the fish from *Symbols of Montana*. Discuss how the fish got its name.
- 2. Play "Fish Trivia." Divide students in to three teams. Give each group one of the fish pictures to signal when they have the answer. Place category pockets where all can see them. Choose a group to go first. The group may select one category and a point amount (10, 20, 30, 40, 50, 60). Read the corresponding question. Whichever group signals first can answer the question. One answer per group. If the first group is incorrect, the other groups may signal in to answer. If a group gets a question correct, they acquire the corresponding number of points. If they get the question wrong, they lose the corresponding number of points. Keep score on the blackboard. The team that gives the correct answer can choose the next category. The team with the most points at the end of the game is the winner.

Further Exploration

• Have students explore the "Fish of Montana" CD and complete the coloring page.



Blackspotted Cutthroat Trout





Lesson 6: Grizzly Bear

Objectives

At the conclusion of the lesson, students will be able to:

 Identify the characteristics and behaviors of the Grizzly Bear.

Time

One 45 minute class.

Materials

- Footlocker
 Materials: none
- User Guide Materials: Bear Facts and Quiz, Lewis' journal excerpt
- Teacher Provided Materials: none

Pre-Lesson Preparation

Read the section on the Grizzly Bear from Symbols of Montana.

Procedure

- 1. Read aloud the section on the Grizzly Bear.
- 2. Share the Bear Facts with the students and talk about the differences between the two bears.
- 3. Have students act out the following behaviors of Grizzly Bears:

Signs of Submission: lateral body posture (turned perpendicular to intruder) looking away, retreating slowly.

Signs of Dominance or Aggression: front forward posture (directly facing intruder), direct gaze, forward movement, bared teeth, holding head high and stretching neck, flattening ears against head.

4. Read aloud Captain Meriwether Lewis' encounter with the Grizzly Bear and have students reinact the episode.

Discussion Questions

1. Have the students take the Bear Facts Quiz.

Further Exploration

 Read the books Moon in Bear's Eyes and Wild Bears!: Grizzly Bear.



THE BEAR FACTS

From Travel Montana

Grizzly Bear



Key Features of the Grizzly Bear:

- Ears rounded, not prominent
- Claws of front feet are long. 2-3 inches ahead of toes.
- Pronounced shoulder hump.
- Broad dished face.
- Shoulders are high point of profile.
- Fur is often silver tipped.
- Larger than black bears- 200 to 1100 pounds.
- Front foot print 5.5 inches wide.
- Color varies from brown to black.
- This bear is on the endangered species list.

Black Bear



Key features of the Black Bear:

- Ears pointed and prominent
- Claws of front feet are short
- No shoulder hump
- Roman nose- no dished face
- Back hips are high point of profile
- Smaller than grizzly bears- 100 to 440 pounds
- Front foot print 3.75 inches wide
- Color varies from black to blond



The Bear Facts Quiz

From Travel Montana

- 1. What bear has a broad dished face.
 - a) Black Bear
 - b) Grizzly Bear
- 2. This bear has no hump above the shoulders.
 - a) Black Bear
 - b) Grizzly Bear
- 3. What bear has the longest claws?
 - a) Black Bear
 - b) Grizzly Bear
- 4. Fur on this bear is often silver tipped.
 - a) Black Bear
 - b) Grizzly Bear
- 5. What bear has the most noticeable ears?
 - a) Black Bear
 - b) Grizzly Bear



Captain Lewis, 14 June 1805

After feasting my eyes on this ravishing prospect and resting myself a few minutes, I determined to proceed as far as the river which I saw discharge itself on the west side of the Missouri, convinced that it was the river which the Indians call Medicine River, and which they informed us fell into the Missouri just above the falls. I descended the hill and directed my course to the bend of the Missouri, near which there was a herd of at least a thousand buffalo. Here I thought it would be well to kill a buffalo and leave him until my return from the river, and if I then found that I had not time to get back to camp this evening, to remain all night here, there being a few sticks of driftwood lying along the shore which would answer for my fire, and a few scattering cottonwood trees a few hundred yards below, which would afford me at least the semblance of a shelter. Under this impression, I selected a fat buffalo and shot him very well, through the lungs.

While I was gazing attentively on the poor animal discharging blood in streams from his mouth and nostrils, expecting him to fall every instant, and having entirely forgotten to reload my rifle, a large white, or rather, brown, bear had perceived and crept on me within twenty steps before I discovered him. In the first moment, I drew up my gun to shoot but at the same instant recollected that she was not loaded, and that he was too near for me to hope to perform this operation before he reached me, as he was then briskly advancing on me. It was an open level plain, not a bush within miles nor a tree within less than three hundred yards of me. The river bank was sloping and not more than three feet above the level of the water. In short, there was no place by means of which I could conceal myself from this monster until I could charge my rifle.

In this situation, I thought of retreating in a brisk walk as fast as he was advancing until I could reach a tree about 300 yards below me, but I had no sooner turned myself about but he pitched at me, open-mouthed and full speed.



I ran about 80 yards, and found he gained on me fast. I then ran into the water. The idea struck me to get into the water to such depth that I could stand and he would be obliged to swim, and that I could, in that situation, defend myself with my espontoon. Accordingly, I ran hastily into the water about waist deep and faced about and presented the point of my espontoon.

At this instant, he arrived at the edge of the water within about twenty feet of me. The moment I put myself in this attitude of defense, he suddenly wheeled about as if frightened, declined the combat on such unequal grounds, and retreated with quite as great precipitation as he had just before pursued me. As soon as I saw him run off in that manner, I returned to the shore and charged my gun, which I had still retained in my hand throughout this curious adventure. I saw him run through the level open plain about three miles, till he disappeared in the woods on Medicine River. During the whole of this distance he ran at full speed, sometimes appearing to look behind him as if he expected pursuit.

I now began to reflect on this novel occurrence and endeavored to account for this sudden retreat of the bear. I at first thought that perhaps he had not smelled me before he arrived at the water's edge so near me, but I then reflected that he had pursued me for about 80 or 90 yards before I took to the water, and on examination saw the ground torn with his talons immediately on the impression of my steps; and the cause of his alarm still remains with me mysterious and unaccountable. So it was, and I felt myself not a little gratified that he had declined the combat. My gun reloaded, I felt confidence once more in my strength, and determined not to be thwarted in my design of visiting Medicine River, but determined never again to suffer my piece to be longer empty than the time she necessarily required to charge her.

I passed through the plain nearly in the direction which the bear had run to Medicine River. Found it a handsome stream, about 200 yards wide, with a gentle current, apparently deep.



Lesson 7: Duck-billed Dinosaur Fossil

Objectives

At the conclusion of the lesson, students will be able to:

 Identify the state fossil and describe the characteristics of the Maiasaura.

Time

One 45-minute class.

Materials

- Footlocker
 Materials: slide show, model of Maiasaura
- User Guide Materials: dinosaur activity worksheets
- Teacher Provided Materials: slide projector

Pre-Lesson Preparation

Read the section on the fossil from Symbols of Montana.

Procedure

- 1. Watch dinosaur slide show. Look at the Maiasaura model.
- 2. Choose one or all of dinosaur worksheets to complete with the class.
- 3. Read the book Maia: A Dinosaur Grows Up with your class.

Discussion Questions

- 1. What is a fossil?
- 2. What does "Maiasaura" mean? Why did they name it "Maiasaura?"
- 3. Dinosaurs laid eggs because they were reptiles. What other animals can you think of that lay eggs? Are they reptiles too?





Name

Dinosaurs and You MAIASAURA PERSON PERSON MAIASAURA PERSON PERSO

Dinosaurs roamed the Earth millions of years ago. You are alive today. But you and dinosaurs still have a lot in common. On the chart below, list some ways you are alike and some ways you are different.

ALIKE DIFFERENT

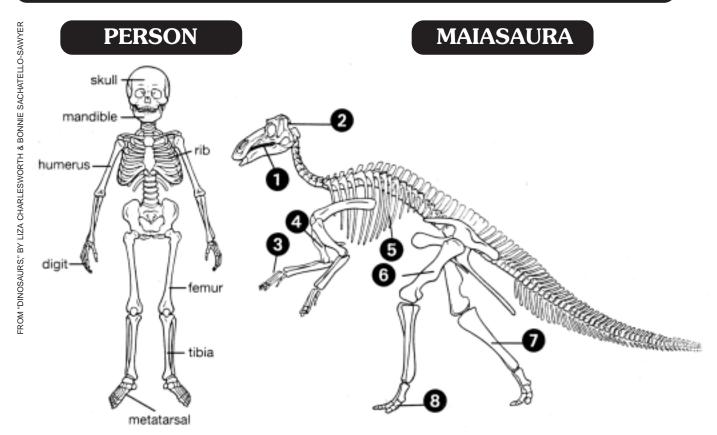
We both have eyes.

People have hair.



Name

Dinosaurs and You (Part Two)



Look at the skeleton of the person. That's what you look like inside! Use it to label the same bones on the dinosaur.

Bone 1 is a mandible	Bone 6 is a
Bone 2 is a	Bone 6 is a
Bone 3 is a	Bone 7 is a
Bone 4 is a	Bone 3 is a



Lesson 8: Make Your Own Mourning Cloak Butterfly

Objectives

At the conclusion of the lesson, students will be able to:

 Identify the parts of a butterfly and the colors of a Mourning Cloak.

Time

One 60-minute lesson.

Materials

- Footlocker
 Materials: none
- User Guide
 Materials: coloring page, picture of Mourning Cloak butterfly
- Teacher Provided
 Materials: Coffee
 filters (2 per child),
 Pipe cleaners (1
 per child), Markers,
 Spray bottle with
 water, copies of
 coloring page.

Pre-Lesson Preparation

The purpose of this lesson is for students to express their understanding of the parts of a butterfly and the color of the Mourning Cloak through a creative art project.

Procedure

- Students color their coffee filters, using the picture of the Mourning Cloak as their color guide. Students should use the outside edge of the filter as the edge of the butterfly's wings. Markers will bleed through the filter.
- When coloring has been completed, lightly spray water on the filters. This makes the colors run and blend into each other. Too much water will ruin the coffee filter. Be sure to spray them over a stink in case the marker runs too much.
- 3. Pinch the coffee filters in the center (from the underside) and put the two pinched sides together. Twist a pipe cleaner around them to hold them together, creating the butterfly's body. Leave the two ends of the pipe cleaner free to be the antennae.

Discussion Questions

- 1. Where does the Mourning Cloak's name come from?
- 2. Why is the Mourning Cloak considered part of the "brush-footed" insect family?
- 3. How long do Mourning Cloak butterflies live?
- 4. What types of foods do Mourning Cloaks eat?

Further Exploration

Complete the Mourning Cloak coloring page.



Mourning Cloak Butterfly

Name Derivation

The North American common name for this species, Mourning Cloak, refers to its resemblance to a traditional cloak worn when one was "in mourning." Its common name in England is "Camberwell Beauty." Doubtless, it has many other common names throughout its Eurasian range.

Their scientific name is: Nymphalis - of, or pertaining to a fountain (Latin) and Antiopa - wife of Lycus, King of Thebes (Greek). Mourning Cloaks belong to one of the larger families of butterflies, the Nymphalidae (brush-footed butterflies). You may notice on some pictures of Mourning Cloaks that they seem to have only 4 legs, contrary to the general rule of 6 legs for insects. Members of the Numphalidae are more commonly known as the "brushfooted butterflies". The front pair of legs are greatly reduced in these insects, often appearing as hairy and "brushlike", hence the name. Why this condition has evolved is, like so many things in nature, uncertain.

Description

Mourning Cloaks are a fairly large butterfly with a wing span of 6-10 cm. The dark, brown wings with beige colored edges and blue spots make them easy to identify. The underside of the wings are cryptically colored, dark brown with lighter brown edges.

Distribution

The Mourning Cloak is found throughout most of North America and Europe and in a broad band across central Asia.

Life Cycle

Adult Mourning Cloak butterflies emerge from their winter hibernation and seek each other out for mating in the spring. In forested habitats, males will perch in sunny glades and wait for females to flutter by. After a brief aerial courtship the pair will mate. The females lay bunches of eggs (30-50) together on a single tree or shrub, in a mass that surrounds a twig. The butterflies probably die soon after mating and egg laying, having spent as much as 10 months as adults, a long life for a butterfly.

Habitat

Mourning Cloaks are found just about anywhere that their main larval food species are found. They don't seem to be linked to any particular habitat type. But their larval host plants are all trees or shrubs, so these must be available in order for the butterflies to exist in a given area.

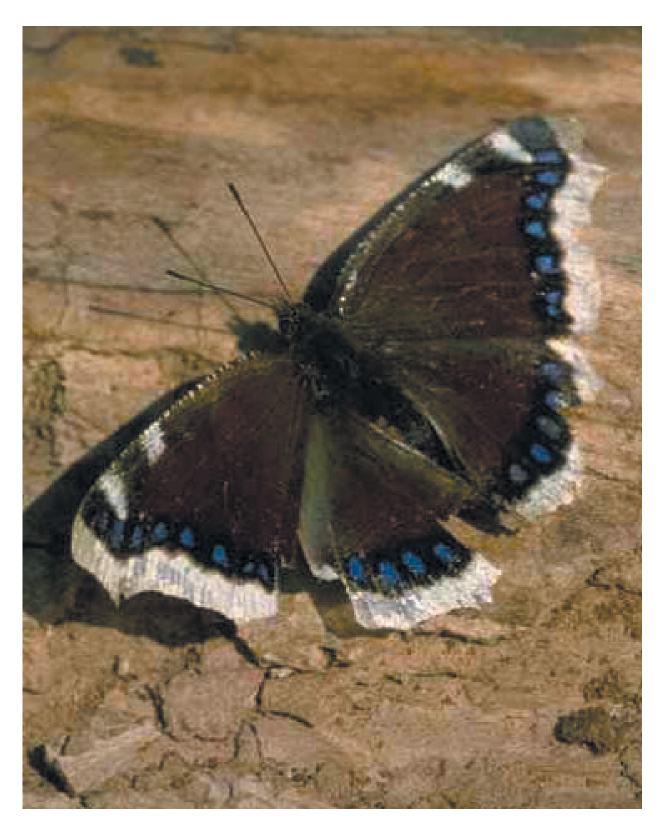
Food

The caterpillars of mourning cloaks eat the leaves of a wide array of trees and shrubs. Some of their more common host plants include: assorted willows, aspens and cottonwoods, elms, and paper birch. Willows seem to be their favorite food, although in urban areas they really seem to like elms.

From: "Mourning Cloaks," by Doug Collicutt, http://www.naturenorth.com/spring/bug/mcloak/Fmcloak.html

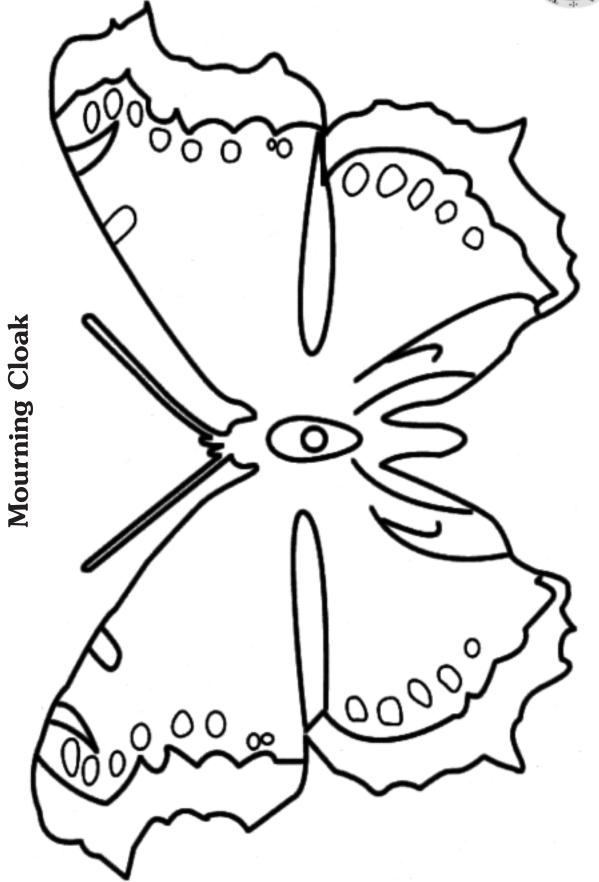


Mourning Cloak



The Treasure Chest: A Look at the Montana State Symbols







Lesson 9: Concluding Activity— Montana Symbols Twister!

Time

One 45- minute class.

Materials

Footlocker Materials: Montana Symbols Twister mat and spinner

User Guide Materials: rules

Teacher Provided

Materials: none

Pre-Lesson Preparation

Review game rules.

Procedure

- Spread the mat face-up on a flat surface.
- Players take off their shoes and set them aside.
- The referee (teacher) is not considered a player; during the game, the referee will spin the spinner, call out the moves, and monitor the game play.
- Position 3 players—one on each side of the mat.

How to Play

- The referee spins the spinner, then calls out the body part and the animal that the arrow points to. For example, the referee may call out: "Right hand, Meadowlark." *All players, at the same time*, must then try to follow the referee's directions as explained below.
- Each player must try to place the called-out body part on a vacant circle of the called-out animal. For example, if the referee calls out "Right hand, Meadowlark," each player must try to place a right hand on any vacant Meadowlark circle.
- If your called-out hand or foot is *already* on a circle of the called-out animal, you must try to move it to another circle of the same animal.
- There can never be more than one hand or foot on any one circle. If two or more players reach for the same circle, the referee must decide which player got there first. The other player(s) must find another vacant circle of the same animal.
- Never remove your hand or foot from a circle unless you're directed to by the referee after a spin. Exception: You may lift a hand or foot to allow another hand or foot to pass by, as long as you announce it to the referee beforehand, and replace it on its circle immediately afterward.

(continued)

- If all 6 circles of a color are already covered, the referee must spin again until a different color can be called out.
- Strategy: Try moving toward an opponent's portion of the mat, forcing the player to go over or under you to place a hand or foot!

Being Eliminated

- Any player who falls, or touches the mat with an elbow or knee, is immediately out of the game. (If you feel that a new position is impossible, or will cause you to fall, you may eliminate yourself.)
- The last player left in the game is the winner!

Team Play

- For a 4-player game, form 2 teams of 2 players each.
 Teams face each other on opposite ends of the mat, standing side-by-side with each foot on a circle so that all 4 circles are covered.
- Just as in a 2- or 3-player game, the referee spins the spinner and calls out a hand or foot and a color circle. Play as in the 2- or 3-player game, with this exception: members of the same team can cover the same circle with one hand or foot each.
- As soon as a player falls or touches the mat with an elbow or knee, the player's team is eliminated and the other team is the winner.



Creativity And Butterflies

GRADE LEVEL: 2-5— Creativity; Science; Art; Language Arts; Gifted

PURPOSE:

The purpose of these activities, used during a study of insects, is to provide away to have all students use the basic objectives of creativity, to provide for the basic needs of gifted children and to also give your nonscientist a chance to shine, in an area that all kids enjoy.

1. **OBJECTIVE:** Fluency

ACTIVITY: Butterflies are flying insects. Make a list of 8-50 other insects that fly.

2. **OBJECTIVE:** Elaboration

ACTIVITY: Caterpillars have 6 legs. Design and draw 3 pairs of shoes, socks or gloves for them to wear. Make a model of at least one pair.

3. **OBJECTIVE:** Flexibility

ACTIVITY: Butterfly eggs hatch on their own on plants. What are 5 things a soon-to-be hatched chrysalis should know. Make a tiny book about these facts for the butterfly to read as soon as it emerges.

4. **OBJECTIVE:** Originality

ACTIVITY: Butterflies taste with their feet. Think of five ways your life would be different if you tasted with your feet. Write a poem, cinquain, haiku etc. about the differences in your life.

5. **OBJECTIVE:** Risk Taking

ACTIVITY: An adventurous moth decides to fly during the daytime. What 3 things does he fear most. Write a song about them.

6. **OBJECTIVE:** Imagination

ACTIVITY: What does a butterfly dream about when it is in the chrysalis stage? Draw a picture of the chrysalis and its dream.

7. **OBJECTIVE:** Complexity

ACTIVITY: In the year 2020 A.D. a mysterious virus from outer space kills all of the butterflies. How does this change the life of the humans in the United States? Write a newspaper headline and article about this event.

8. **OBJECTIVE:** Curiosity

ACTIVITY: Adult monarch butterflies have never been to their winter home. Thing of at least 5 questions they would ask a travel guide and make a travel brochure to answer the questions.



Montana Symbols Word Find

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AGATE GRIZZLY BEAR

BIRD MONTANA MELODY

BITTERROOT MOURNING CLOAK

BLUEBUNCH WHEATGRASS PONDEROSA PINE

BUTTERFLY SAPPHIRE

FISH SEAL

FLAG TREE

FOSSIL WESTERN MEADOWLARK

GRASS



Montana Symbolic Crossword Puz				1					
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Across	H			-	\dashv				
2. The State Tree				-					
4. The State Flower				F	_				
6. One of the State Gemsto	ones								
10. The State Fish		11							
11. This state symbol is on	the flag								
Down 1. The State Grass									
3. The State Butterfly									
5. The State Fossil							H		
7. The State Song									

8. The State Bird

9. The State Animal



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